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(54) Title: METHODS AND MATERIALS FOR USING CHEMICAL COMPOUNDS AS A TOOL FOR NUCLEIC ACID STORAGE ON MEDIA OF NUCLEIC ACID PURIFICATION SYSTEMS

(57) Abstract: The present invention relates to methods for isolating and storing, nucleic acid from a sample containing nucleic acid, such as a cell sample or cell lysate. The nucleic acid is isolated on a solid phase medium, which is then dried, and which can be stored efficiently, such as at room temperature, in columns, tubes, and microwell plates having a wide variety of filters and other solid phase media, for extended periods of time, including days, weeks, and months. The invention provides methods for isolating and storing nucleic acid from a sample by applying the sample to a solid phase medium, retaining the cells, lysing the cellular retentate, drying the medium and retaining the nucleic acid, storing the nucleic acid for extended periods of time at room temperature and humidity, and optionally eluting the nucleic acid. The invention provides methods for storing nucleic acid-containing samples on a wide range of solid phase media in many types of tubes, columns, or multiwell plates, many of which are commercial available.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : C12Q 1/68; C12P 19/34; C07H 21/02, 21/04, 19/00			
US CL : 435/6,91.1,91.2; 536/22.1,23.1,24.3,24.31,24.32,24.33			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S. : 435/6,91.1,91.2; 536/22.1,23.1,24.3,24.31,24.32,24.33			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Y	US 5,496,562 A (BURGOYNE) 05 March 1996 (05.03.1996), see whole document especially abstract.	1-76	
Y	US 5,756,126 A (BURGOYNE) 26 May 1998 (26.05.1998), see whole document especially abstract.	1-76	
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.			
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Continuation of Item 4 of the first sheet:

Title is greater than 17 words

Chemical Compounds for Nucleic Acid Storage on Media of Nucleic Acid Purification Systems

Continuation of B. FIELDS SEARCHED Item 3:

EAST, STN- biosis, medline, cancerlit, biotechds, lifesci, caplus, embase
search terms: nucleic acid, fiber, filter, extraction